



UNITED STATES PATENT AND TRADEMARK OFFICE

Car

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,702

04/20/2006

Jean-Pierre Lallier

FR-AM 1984 NP

4390

31684

7590

01/03/2008

ARKEMA INC.

PATENT DEPARTMENT - 26TH FLOOR

2000 MARKET STREET

PHILADELPHIA, PA 19103-3222

EXAMINER

WEBB, GREGORY E

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

01/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,702

Applicant(s)

LALLIER ET AL.

Examiner

Gregory E. Webb

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/20/06
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-7, 9-12, and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Doyel (US7288511).

In table 1, Doyel teaches various combinations of the claimed trans-1,2-dichloroethylene and hydrofluoroethers. Doyel teaches the addition of various additives intended to stabilize these binary compositions.

Concerning the acid acceptor and the most preferred oxide, Doyel teaches the following:

The preferred cyclic ethers are: 1,4-dioxane, 1,3-dioxolane, tetrahydrofuran (THF), methyl THF, dimethyl THF and tetrahydropyran (THP), methyl THP, dimethyl THP, ethylene oxide, **propylene oxide**, **butylene oxide**, amyl oxide, and isoamyl oxide. Most preferred is THF. (*emphasis added*)

Concerning the radical scavenger and the preferred phenol derivative, Doyel teaches the following:

The aromatic compound useful as an enhancement agent is of the formula: C.sub.6H.sub.n--X.sub.6-n where n is 0 to 6. X can be hydroxyl, halogen or any of the alkane, alcohol, ether groups listed above. Examples of these aromatics are benzene, toluene, xylene, ethylbenzene, cumene, mesitylene, hemimellitene, pseudocumene, butylbenzene, **phenol** and benzotrifluoride. Among the most preferred are toluene, xylene and mesitylene. (*emphasis added*)

Concerning the preferred alkene and the most preferred alkene, Doyel teaches the following:

The terpene useful as an enhancement agent contains at least one **isoprene** group of the general formula: (*emphasis added*)

Concerning the Lewis base and the preferred acetal, Doyel teaches the following:

The ether useful as an enhancement agent is of the formula R.sub.3--O--R.sub.4 where R.sub.3 is C.sub.1-C.sub.10 alkyl or alkynyl, C.sub.5-C.sub.6 cycloalkyl, benzyl, phenyl, furanyl or tetrahydrofuranyl, R.sub.4 is C.sub.1-C.sub.10 alkyl or alkynyl, C.sub.5-C.sub.6 cycloalkyl, C.sub.1-C.sub.4 ether, benzyl, phenyl, furanyl or tetrahydrofuranyl. Examples of these ethers are ethyl ether, methyl ether, propyl ether, isopropyl ether, butyl ether, **methyl tert butyl ether**, ethyl tert butyl ether, vinyl ether, allyl ether, **methylal**, ethylal and anisole. In the composition listed R.sub.3 and R.sub.4, which can be the same or different, can be C.sub.1 to C.sub.10 alkyl or alkynyl, preferably C.sub.1 to C.sub.6 alkyl or alkynyl, more preferably C.sub.1 to C.sub.4 alkyl. Among the most preferred are isopropyl ether, **methylal** and propyl ether. (*emphasis added*)

Concerning the preferred ketone and the most preferred ketone, Doyel teaches the following:

The ketone component of the mixture is of the formula: R.sub.5--C.dbd.O--R.sub.6 where R.sub.5 is C.sub.1-C.sub.10 alkyl or alkynyl, C.sub.5-C.sub.6 cycloalkyl, benzyl, furanyl or tetrahydrofuranyl, R.sub.6 is C.sub.1-C.sub.10 alkyl, C.sub.5-C.sub.6 cycloalkyl, benzyl, phenyl, furanyl or tetrahydrofuranyl. Examples of these ketones are **acetone**, **methyl ethyl ketone**, 2-pentanone, 3-pentanone, 2-hexanone, 3-hexanone, and methyl isobutyl ketone. R.sub.5 and R.sub.6, which can be the same or different, can be are, preferably C.sub.1 to C.sub.6 alkyl, more preferably C.sub.1 to C.sub.4 alkyl. Among the most preferred are **acetone**, **methyl ethyl ketone**, 3-pentanone and methyl isobutyl ketone. (*emphasis added*)

Concerning the preferred ester, Doyel teaches the following:

The ester useful as an enhancement agent is of the formula R.sub.1--COO--R.sub.2 where R.sub.1 and R.sub.2 could be the same or different, R.sub.1 is hydrogen, C.sub.1-C.sub.20 alkyl, C.sub.5-C.sub.6 cycloalkyl, benzyl, furanyl or tetrahydrofuranyl, preferably C.sub.1 to C.sub.8 alkyl, more preferably C.sub.1 to C.sub.4 alkyl; R.sub.2 is C.sub.1-C.sub.8 alkyl, preferably C.sub.1 to C.sub.4 alkyl, C.sub.5-C.sub.6 cycloalkyl, benzyl, phenyl, furanyl or tetrahydrofuranyl. Examples of these esters are **methyl formate**, **methyl acetate**, methyl propionate, methyl butyrate, ethyl formate, ethyl acetate, ethyl propionate, ethyl butyrate, propyl formate, propyl acetate, propyl propionate, propyl butyrate, butyl formate, butyl acetate, butyl propionate, butyl butyrate, methyl soyate, isopropyl myristate, propyl myristate, and butyl myristate. Among the most preferred are **methyl formate**, **methyl acetate**, ethyl acetate and ethyl formate. (*emphasis added*)

Concerning the preferred buffer, preferred amine and the most preferred amine, Doyel teaches the following:

The amine useful as an enhancement agent is of the formula: NR.sub.7R.sub.8R.sub.9 where R.sub.7, R.sub.8 and R.sub.9 can be hydrogen, hydroxyl, C.sub.1-C.sub.10 alkyl, C.sub.1-C.sub.10 alcohol. R.sub.7, R.sub.8 and R.sub.9 can all be the same or independently different. Examples of these amines are methylamine, dimethylamine, trimethylamine, ethylamine, **diethylamine**, **triethylamine**, n-propylamine, di-n-propylamine, tri-n-propylamine, isopropylamine, di-isopropylamine, tri-isopropylamine, n-butylamine, isobutylamine, sec-butylamine, tert-butylamine, ethanolamine, **diethanolamine**, **triethanolamine**, amino methyl propanol and hydroxylamine. Most preferred are butylamines and **triethylamine**. (*emphasis added*)

3. Claims 1-7, and 9-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hanada (US7163645).

Hanada teaches in table 1 a composition containing trans-1,2-dichloroethylene, methanol and a fluorinated compound. Hanada teaches various stabilizing agents which can be added to these compositions.

Concerning the radical scavenger, preferred phenol derivative, Lewis base, preferred nitro compound, preferred buffer, preferred amine and the most preferred amine, Hanada teaches the following:

The compounds may, for example, be a nitro compound such as **nitromethane**, **nitroethane**, nitropropane or nitrobenzene; an amine such as **diethylamine**, **triethylamine**, iso-propylamine or n-butylamine; a **phenol** such as **phenol**, o-cresol, m-cresol, p-cresol, **thymol**, p-t-butyl**phenol**, t-butyl **catechol**, **catechol**, **isoeugenol**, o-methoxy**phenol**, **bisphenol A**, isoamyl salicylate, benzyl salicylate, **methyl salicylate** or 2,6-di-t-butyl-p-cresol; and a triazole such as 2-(2'-hydroxy-5'-methylphenyl)benzotriazole, 2-(2'-hydroxy-3'-t-butyl-5'-methylphenyl)-5-chlorobenzotriazole, 1,2,3-benzotriazole or 1-[(N,N-bis-2-ethylhexyl)aminomethyl]benzotriazole. (*emphasis added*)

Concerning the preferred ketone and the most preferred ketone, Hanada teaches the following:

As the ketones, C.sub.3-9 linear or cyclic ketones are preferred. Specifically, **acetone**, **methyl ethyl ketone**, 2-pentanone, 3-pentanone, 2-hexanone, methyl isobutyl ketone, 2-heptanone, 3-heptanone, 4-heptanone, diisobutyl ketone, mesityl oxide, phorone, 2-octanone, cyclohexanone, methylcyclohexanone, isophorone, 2,4-pentanedione or 2,5-hexanedione may, for example, be mentioned. More preferred is a C.sub.3-4 ketone such as **acetone** or **methyl ethyl ketone**. (*emphasis added*)

Concerning the preferred ester, Hanada teaches the following:

As the esters, C.sub.2-19 linear or cyclic esters are preferred. Specifically, **methyl formate**, ethyl formate, propyl formate, butyl formate, isobutyl formate, pentyl formate, **methyl acetate**, ethyl acetate, propyl acetate, **isopropyl acetate**, butyl acetate, isobutyl acetate, sec-butyl acetate, pentyl acetate, methoxybutyl acetate, sec-hexyl acetate, 2-ethylbutyl acetate, 2-ethylhexyl acetate, cyclohexyl acetate, benzyl acetate, methyl propionate, ethyl propionate, butyl propionate, methyl butyrate, ethyl butyrate, butyl butyrate, isobutyl isobutyrate, ethyl 2-hydroxy-2-methyl propionate, methyl benzoate, ethyl benzoate, propyl benzoate, butyl benzoate, benzyl benzoate, gamma.-butyrolactone, diethyl oxalate, dibutyl oxalate, dipentyl oxalate, diethyl malonate, dimethyl maleate,

diethyl maleate, dibutyl maleate, dibutyl tartrate, tributyl citrate, dibutyl sebacate, dimethyl phthalate, diethyl phthalate or dibutyl phthalate may, for example, be mentioned. More preferred is a C.sub.3-4 ester such as **methyl acetate** or ethyl acetate. (*emphasis added*)

4. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Samejima (US5607912).

Samejima teaches azeotropic compositions containing hydrochlorofluorocarbons. Samejima further teaches the addition of hydrocarbons and alcohols to form these azeotropic mixtures (see abstract).

Samejima teaches suitable chlorinated compounds suitable for their invention including the trans-1,2-dichloroethylene.

Concerning the trans-1,2-dichloroethylene, Samejima teaches the following:

The chlorinated hydrocarbons having from 1 to 4 carbon atoms, include dichloromethane, trichloromethane, **trans-1,2-dichloroethylene**, cis-1,2-dichloroethylene, 1-chloropropane, 2-chloro-2-methylpropane, 1,1,1-trichloroethane and 1,1-dichloroethane. The fluorinated hydrocarbons include 1,1,2-trichlorotrifluoroethane (R113), 1,1,2-trichloro-2,2-difluoroethane (R122), 1,2,2-trichloro-1,2-difluoroethane (R122a), 1,1,1-trichloro-2,2-difluoroethane (R122b), 1,1-dichloro-2,2,2-trifluoroethane (R123), 1,2-dichloro-1,1-difluoroethane (R132b), 1,2-dichloro-1-fluoroethane (R141), 1,1-dichloro-1-fluoroethane (R141b) and trichlorofluoromethane (R11). Likewise, the brominated hydrocarbons include 2-bromopropane as a preferred example. (*emphasis added*)

Concerning the acid acceptor and the most preferred oxide, Samejima teaches the following:

Specifically, they include **1,2-butylene oxide**, **epichlorohydrin**, **propylene oxide**, **2,3-butylene oxide** and **styrene oxide**. More preferred are **1,2-butylene oxide** and **epichlorohydrin**. (*emphasis added*)

Concerning the radical scavenger and the preferred phenol derivative, Samejima teaches the following:

Specifically, they include **phenol**, o-cresol, m-cresol, p-cresol, **thymol**, p-tert-butylphenol, tert-butylcatechol, **catechol**, **isoeugenol**, o-methoxyphenol, 4,4'-dihydroxyphenyl-2,2-propane, isoamyl salicylate, benzyl salicylate, **methyl salicylate** and 2,6-di-t-butyl-p-cresol. More preferred are **phenol**, 4,4'-dihydroxyphenyl-2,2-propane and 2,6-di-t-butyl-p-cresol. (*emphasis added*)

Concerning the preferred alkene, Samejima teaches the following:

As the **amylenes**, **.alpha.-amylene**, **.beta.-amylene**, **.gamma.-amylene**, **.alpha.-isoamylene** and **.beta.-isoamylene** are preferred. More preferred is **.beta.-amylene**. (*emphasis added*)

Concerning the preferred heterocycle, Samejima teaches the following:

As the furans, those represented by the following formulas are preferred: **##STR8##** wherein each of R, R' and R'' is a saturated or unsaturated hydrocarbon group having from 1 to 2 carbon atoms. Specifically they include tetrahydrofuran, **n-methylpyrrole**, **2-methylpyrrole** and **3-methylpyrrole**. More preferred is **N-methylpyrrole**. (*emphasis added*)

Concerning the preferred nitro compound, Samejima teaches the following:

As the nitro compounds, those represented by the formula $R-NO_2$ wherein R is a chain or cyclic hydrocarbon group having from 1 to 6 carbon atoms and containing a saturated or unsaturated bond, may be employed. Specifically, they include **nitromethane**, **nitroethane**, **1-nitropropane**, **2-nitropropane** and **nitrobenzene**. More preferred are **nitromethane** and **nitroethane**. (*emphasis added*)

Concerning the preferred ester, Samejima teaches the following:

Specifically, they include **methyl acetate**, ethyl acetate, propyl acetate, n-butyl acetate, isobutyl acetate, **isopropyl acetate**, ethyl acrylate, 2-hydroxyethyl methacrylate, methyl acrylate, butyl acrylate, phenyl acrylate, allyl acrylate, caprolactam, ethyl carbamate, methyl carbamate, and methyl salicylate. More preferred are **methyl acetate** and methyl salicylate. (*emphasis added*)

Concerning the preferred buffer, preferred amine and the most preferred amine, Samejima teaches the following:

Specifically, they include pentylamine, hexylamine, **diisopropylamine**, diisobutylamine, di-n-propylamine, diallylamine, **triethylamine**, n-methylaniline, **pyridine**, picoline, morpholine, **N-methylmorpholine**, triallylamine, allylamine, .alpha.-methylbenzylamine, methylamine, dimethylamine, trimethylamine, ethylamine, **diethylamine**, propylamine, isopropylamine, sec-butylamine, tert-butylamine, **dibutylamine**, tributylamine, dipentylamine, tripentylamine, 2-ethylhexylamine, **aniline**, **N,N-dimethylaniline**, **N,N-diethylaniline**, ethylenediamine, propylenediamine, diethylenetriamine, tetraethylenepentamine, benzylamine, dibenzylamine, diphenylamine and diethylhydroxylamine. More preferred are **diisopropylamine** and diallylamine. (*emphasis added*)

5. Claims 1-7, 9-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Beaver (US6133221).

Concerning the trans-1,2-dichloroethylene, Beaver teaches the following:

Non-limiting examples of suitable co-solvents include halogenated hydrocarbons having from 1 to 10 carbons and 1 to 4 chlorine and/or bromine atoms such as n-propyl bromide, bromochloromethane, chlorodibromomethane, 1-bromo-2-chloroethane, 2-bromo-1-chloropropane, n-butyl bromide, isobutyl bromide, n-amyl bromide, alkyl bromide, hexylene bromide, bromodichloromethane, bromotrichloromethane, dibromoethylene, **trans-1,2-dichloroethene**, methylene chloride, and 2-bromo-1-chloropropane. (*emphasis added*)

Concerning the acid acceptor and the most preferred oxide, Beaver teaches the following:

Non-limiting examples of suitable **epoxides** and alcohols include the **epoxides epichlorohydrin, propylene oxide, butylene oxide**, cyclohexene oxide, glycidyl methyl ether, glycidyl methacrylate, pentene oxide, cyclopentene oxide and cyclohexene oxide and the alcohols isopropanol, propanol, butanol and sec-butanol. They are usable either singularly or in the form of a mixture of two or more of them. (*emphasis added*)

Concerning the radical scavenger, preferred ketone and the most preferred ketone, Beaver teaches the following:

Also suitable as co-solvents are non-halogenated hydrocarbons which have a solvent utility in combination with the fluorine containing hydrobromocarbons. By the term "hydrocarbon" is meant a compound which contains mostly carbon and hydrogen but can also contain some oxygen, sulfur and/or nitrogen constituents. Generally, the co-solvent hydrocarbons can be found in the following classes: alkanes, **alkenes**, cycloalkanes, cyclo**alkenes**, aromatics, alcohols, ketones, esters, ethers, amines and mineral oils and derivatives thereof Exemplary hydrocarbon solvents include hexane, benzene, toluene, cyclohexane, terpenes, such as pinene, limonene, carene and camphene, **acetone**, methanol, propanol, ethanol, isopropanol and methylethyl ketone. (*emphasis added*)

Concerning the preferred heterocycle and the Lewis base, Beaver teaches the following:

Non-limiting examples of suitable **ethers** include 1,2-dimethoxyethane, 1,4-dioxane, 1,3-dioxolane, diethyl **ether**, diisopropyl **ether**, dibutyl **ether**, trioxane, alkyl cellosolves in which the alkyl group has 1 to 10 carbon atoms such as methyl cellosolve, ethyl cellosolve and isopropyl cellosolve, dimethyl **acetal**, gamma.-butyrolactone, methyl t-butyl **ether**, tetrahydrofuran and N-**methylpyrrole**. They are usable either singularly or in the form of a mixture of two or more of them. (*emphasis added*)

Concerning the preferred nitro compound, Beaver teaches the following:

Non-limiting examples of nitroalkanes usable in the present invention include **nitromethane**, **nitroethane**, 1-nitropropane, 2-nitropropane and nitrobenzene. They are usable either singularly or in the form of a mixture of two or more of them. (*emphasis added*)

Concerning the preferred buffer and the preferred amine, Beaver teaches the following:

Non-limiting examples of suitable amines include hexylamine, octylamine, 2-ethylhexylamine, dodecylamine, ethylbutylamine, hexylmethylamine, butyloctylamine, **dibutylamine**, octadecylmethylamine, **triethylamine**, tributylamine, diethyloctylamine, tetradecyldimethylamine, diisobutylamine, **diisopropylamine**, pentylamine, **N-methylmorpholine**, isopropylamine, cyclohexylamine, butylamine, isobutylamine, **dipropylamine**, 2,2,2,6-tetramethylpiperidine, N,N-di-allyl-p-phenylenediamine, diallylamine, **aniline**, ethylenediamine, propylenediamine, diethylenetriamine, tetraethylenepentamine, benzylamine, dibenzylamine, diphenylamine and diethylhydroxyamine. They are usable either singularly or in the form of a mixture of two or more of them. (*emphasis added*)

Conclusion

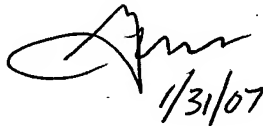
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/576,702
Art Unit: 1796

Page 10

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



1/31/07

Gregory E. Webb
Primary Examiner
Art Unit 1796

gew